FOR YOUR INFORMATION

Spring 2009

Mississippi Wireless Integrated Network (MSWIN)

By Bill Roach, Executive Officer
Mississippi Wireless Communication Commission

The Mississippi Wireless Communication Commission (WCC) and Legislative Advisory Board, created during the 2005 Legislative Session (Senate Bill 2514), is responsible for the efficient use of public resources to ensure that law enforcement personnel and essential public health and safety personnel have effective communications services available in emergency situations, as well as ensure the rapid restoration of such communications in the event of disruption caused by natural disaster, terrorist attack, or other public emergency.

The commission's core focus is to provide communications resources to the people who protect our citizens. The WCC has been given the responsibility of constructing, operating, and maintaining the primary statewide communications network for state and local first responders and administrators. To that end, in June 2006 a Request for Proposals (RFP) was issued resulting in a contract award to Motorola. Included in this agreement is the build out of the 700 MHZ Mississippi Wireless Integrated Network (MSWIN), scheduled in three major phases (see map on page two).

Phase 1 is made up of forty-four tower sites in the southern region of the state. Twenty-nine have been built, eighteen are operational for Wide Area Trunking, and three are currently under construction. A pilot is under way for coverage testing performed by local government. Two counties at a time will use radios in vehicles to test coverage within the designated areas. All of Phase 1 will be operational by summer 2009.

To enhance the state of readiness during emergencies, three 4-channel RF Sites on Wheels (SOWs) and one deployable Master Site on Wheels (MSOW) are a part of the MSWIN configuration. If one of the three SOWs is destroyed by a catastrophic event, the MSOW will provide backup.

Phase 2 is made up of 52 tower sites in the central region of the state. The Site Candidate Information Packages (SCIPS), which identify parcels, ownership, and constructability, are complete for all 52 sites. Phase 2 is further broken down into Phases 2A, 2B, 2C, and 2D, consisting of approximately 13 sites each. Phase 2A, including two microwave paths from Phase 1 and a microwave loop around the Jackson Metropolitan Area, will be operational in

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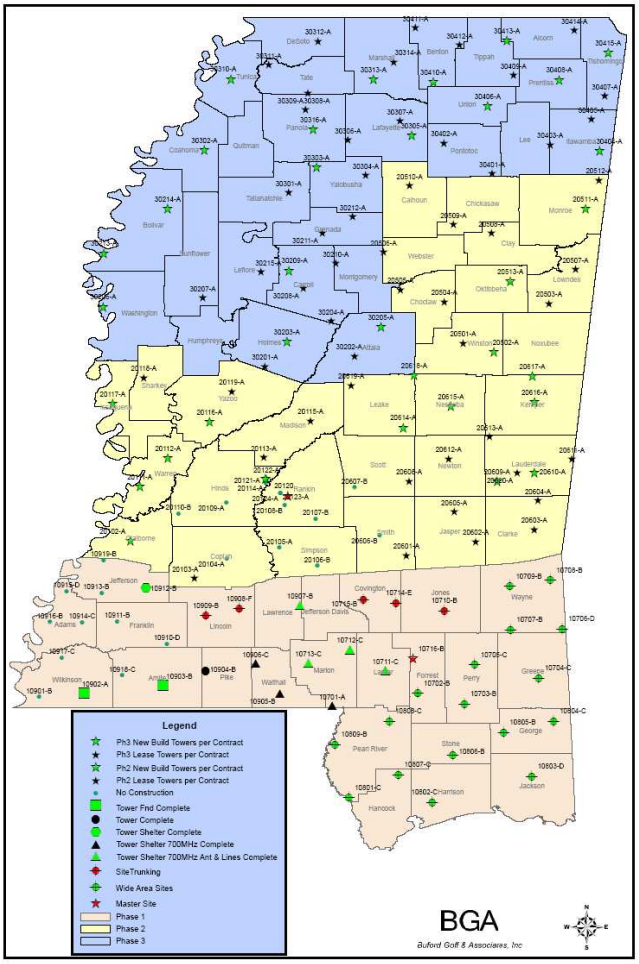
MSWIN Construction Status (3/27/09)



mid-summer of 2009, with Phases 2B, 2C, and 2D to follow. All of Phase 2 will be operational by March 2010.

Phase 3 is made up of 45 tower sites in the northern region of the state. Tower sites have been identified and SCIPS are complete for all 45 of these sites.

The scheduled build out of MSWIN is about 16 to 18 months ahead of schedule and under budget. With appropriate funding, completion of the MSWIN system is expected by December 31, 2010.

Cyber Security Trends for 2009

Provided by: Multi-State Sharing and Analysis Center
www.msisac.org

MS-ISAC

The volume and complexity of cyber threats continue to increase. More of our activities—whether at home, school, or work—involve computers and the Internet. In fact, in the not too distant future, your household appliances may be computerized and controlled remotely from your PDAs. Simultaneously, the knowledge required to launch a successful cyber attack continues to decrease. As we develop more defenses, the cyber criminals and hackers come up with new ways to attack our computers. These factors create an environment in which vigilance on a daily basis is required to help mitigate the risks. Threats such as identity theft, worms and viruses, loss of sensitive information, and other malicious activity are part of an ever-evolving cyber security threat landscape.

Some of the key challenges we are facing in 2009 focus on application security. Application security is a crucial layer in a multi-tiered cyber security strategy. Building security in at the beginning of development is an important factor in minimizing potential vulnerabilities. We've seen the results when vulnerabilities in web applications are exploited, leading to SQL injection attacks, cross-site scripting, and other malicious activity.

Cyber criminals take advantage of commercial websites that have poor security to add code to the website without the knowledge of the web hosting company. That code may silently re-direct the user's computer to another site that will download malware to the user's computer without the user's

Cyber Security Trends for 2009

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knowledge. The attackers may also add a script to the site that will automatically execute on the user's computer.

Another alarming trend continues to be the evolution of cyber crime, which has morphed from fairly innocuous website hacking and "graffiti" attacks to organized crime syndicates seeking profit. Cybercrime is now big business. Attackers now want your credit card and other financial information as well as your social security number. According to a recent study by McAfee, the global cost of cyber crime due to identity theft and data breaches is an estimated $1 trillion dollars. Many data thefts are orchestrated by organized crime, both in the U.S. and abroad.

The economic recession is another factor that may impact cyber security challenges. The risks due to insider threats are another major concern and are expected to increase due to the economic downturn. Additionally, phishing scams and other social engineering attacks will increase as attackers try to take advantage of bank closings, claims for "easy credit", or other online scams. Phishing attempts are no longer easily detected based on misspelled words in the email scam or claims of large sums of money left to you in some foreign location. The phishing scams are becoming more targeted and more "realistic" in appearance.

Holidays and major news events are still popular vehicles for compromising computers. For example, email messages were circulated around Valentine's Day that would infect a user's computer when the message was clicked. Once the computer was infected, the malware would attempt to capture the user's personal information and transmit it to the cyber criminals.

What can be done to protect my computer and my personal information?

Good security is implemented through a multi-layer approach. Users can minimize risk by following the recommendations below:

- Install and maintain a firewall.
- Use anti-virus and anti-spyware software and set them to auto-update.
- Keep operating system and other software up-to-date by enabling the auto-update feature.
- Be cautious about all communications; think before you click. If an email appears to be a phishing communication, do not respond. Delete it.
- Do not open email or related attachments from untrusted sources.
- If you receive an email appearing to be from a legitimate business requesting the submission of personal information, it is most likely a scam. Legitimate businesses do not send emails requesting personal information.

For additional information on protecting yourself from the latest cyber threats, please visit:

Phishing – How to Avoid Getting Hooked!
www.msisac.org/awareness/news/2008-10.cfm

Online Shopping
www.msisac.org/awareness/news/2007-12.cfm

Top Ten Cyber Security Tips
www.msisac.org/awareness/news/2006-10.cfm

For more monthly cyber security newsletter tips please visit:
www.msisac.org/awareness/news/

Geographic Information Systems (GIS)

By Deb Breazeale, ITS
Emerging Technology Coordinator

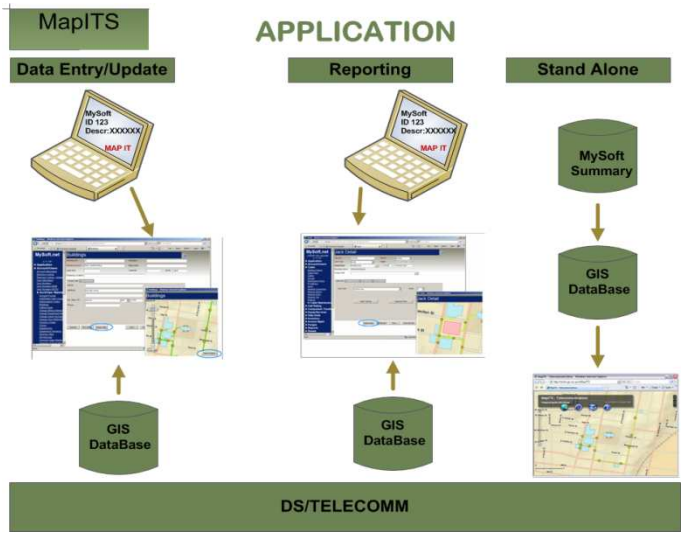
The Mississippi Geospatial Clearinghouse (MGC) was placed in production in September 2007 and serves as the state's centralized portal. The Geographic Information System (GIS) community can use the MGC to access, research, and share a comprehensive warehouse of Mississippi's geospatial resources. Moreover, the MGC is the primary location for the Mississippi Digital Earth Model (MDEM). These seven framework layers comprising MDEM are the standard components of digital maps used by GIS communities throughout the world.

As mandated by House Bill 861, passed by the Mississippi Legislature in 2003, a goal of the MGC is to make the application of spatial information technologies within the state of Mississippi more efficient by eliminating the duplication of spatial data production and distribution through cooperation, standardization, communication, and coordination. Data that has been stored in the MGC can be downloaded by state agencies, city and county government, and the public. Based on the statistics gathered from March 12, 2008, to October 2, 2008, using Web Traffic Analyzer, the MGC has been a tremendous sucess. During this time period alone, the clearinghouse had a total number of 299,059 recorded visitors, 953 MGC registered users, and an estimated 36 terabytes of data were transferred.

The MGC provides the foundation from which GIS applications can be developed that will meet the business needs of governmental agencies and/or public entities. The following is a brief description of how three agencies have already begun putting information from the MGC to use in their efforts to develop GIS applications for their specific needs.

Mississippi Department of Information Technology Services (ITS)

The Division of Telecommunication Services within ITS, provides and maintains the voice, video, and data network infrastructure for state government, including the Capitol Complex. The division is in the process of developing a GIS application called MapITS that will be integrated with the division's existing tracking software called MySoft. MapITS will enable management and staff to view the telecommunications resources of the Capitol Complex in a geographical format. This data format will greatly enhance the division's ability to manage the telecommunications resources serving the Capitol Complex area. It will also be a vital resource for planning and will be critical should there be any type of disaster in the Capitol Complex area.



Mississippi Secretary of State (SOS)

The Public Lands Division of the SOS is in the process of updating its Lands Management System. The Public Lands Division administers state agency lands that are those public lands under the direct management and use of departments and agencies within the state's executive branch. This includes land such as Sixteenth Section Public School Trust Lands, state tidelands, tax forfeited lands, agency

Geographic Information Systems (GIS)
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held lands, as well as historical lands information. The current system is outdated and must go through a re-tooling process due to technology and process improvements. The new application will be developed from a traditional business application, but will utilize GIS to help improve decision making and will allow for a user interface with traditional GIS mapping capabilities.

Mississippi Department of Archives and History (MDAH)

The MDAH is in the process of developing a GIS application using the resources of ITS and the MGC that will present state historical information and assets in a geographical format. This application will have a secure internal component that will allow the agency to track assets plus a public component that will make these assets available to the public via the Internet. There will also be an E-government component designed into the application that will allow MDAH to collect fees from researchers.

Mississippi Coastal Information Exchange (MSCHIE)

By Kevin Gray ITS
Policy and Planning Coordinator

In partnership with Information & Quality Healthcare (IQH), ITS led a cross-functional team in the development of Request For Proposal (RFP) Number 3560, which established the Mississippi Coastal Health Information Exchange (MSCHIE). This proof-of-concept project creates a health information exchange network among participating health care providers, focusing on integrating patient information and linking providers on an interoperable network to improve patient care and reduce costs. The project also develops a data repository containing vital health information that can be readily accessed by authorized providers in time of need.

Eight proposals were received in response to the RFP and after technical and functional consensus scoring and a recommendation by the evaluation team, IQH awarded the contract to Medicity, which was incorporated in September of 2008. Since then, IQH has recruited three initial coastal stakeholders to participate in the MSCHIE pilot project; Memorial Hospital at Gulfport, Singing River Hospital (SRH) at Pascagoula, and Coastal Family Health Center (CFHC) at Biloxi.

During the March 2009 ITS Board Meeting, Bud Douglas, Project Manager for MSCHIE, presented an update to the board declaring, "We are extremely happy about the progress and the willingness of the participants and Medicity to get this project up and rolling. With the recent push from the Obama administration to move the country towards electronic health records and the opportunities available for funding initiatives within the recent economic stimulus package, we're very excited about where we are and where we can take this project."

Currently, testing is underway on the sharing of information between Singing River Hospital and their wholly owned clinics. Medicity is also developing interfaces for CFHC, and, according to Mr. Douglas, MSCHIE hopes to be able to have enough information in the exchange to begin demonstrations for participant recruitment in the early part of summer 2009. While MSCHIE begins as a coastal project concentrating on the six coastal counties most affected by Hurricane Katrina, the long-term vision includes statewide expansion to provide better medical care for all Mississippians.

New Emerging Technology Website

By Deb Breazeale, ITS
Emerging Technology Coordinator

Emerging technology is defined as those technologies which represent new and significant developments within an information technology (IT) field. The Mississippi Department of Information Technology Services (ITS) works with state agencies and institutions to research and assess new IT that could be beneficial to state government. When new technologies are deemed viable for this purpose, ITS can assist in pilot implementations and project testing.

To assist in this effort, ITS developed and maintains the Emerging Technology Website, which provides current information to help agencies become familiar with and consider how new and emerging technologies could benefit them. The information found on this site can be used to great advantage by agencies during their IT planning cycle.

In an effort to make the Emerging Technology Website easier to use and a better repository for useful information, ITS is re-designing the site. ITS hopes this reorganization of the way information is presented, will expedite access to helpful information regarding emerging technologies. The website will represent new IT developments in three separate categories based on where the technology is in its development. These categories will be:

AVAILABLE TODAY

This category will include information and links to sites about IT that are new to state government, but are available today. Two examples of what will be included in this category are Geographic Information Systems (GIS) and Virtualization.

ON THE HORIZON

This category will include information and links to sites about IT that will be widely used by state government in the near future. Cyber Security and VoIP are examples of technologies that will begin to be implemented within the next few years and will be explored in this category.

IN THE FUTURE

This last category will contain information on IT that is considered cutting edge and still evolving, but could potentially be beneficial to state government. Examples of the type of technologies that will be found here are Web 2.0 and Cloud Computing.

ITS hopes the enhancements to the Emerging Technology Website will encourage agency participation in exploring new and exciting changes in the field of IT. A future enhancement to the site will be to provide a way to receive requests and feedback from agencies concerning new IT. Agencies will then be able to use this site as a way to monitor the progress of new technologies and share ideas and opinions with ITS as well as each other.

FOR YOUR INFORMATION
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